Piedmont Regional Office

JUN 03 2013

## LAND APPLICATION OF BIOSOLIDS EVERETT PICKETT UPSHAW

KW36 (FIELDS 1 – 10) KING WILLIAM COUNTY, VIRGINIA MAY 2013



May 14, 2013

Mr. Seth Mullins Dept. of Environmental Quality Piedmont Regional Office 4949-A Cox Road Glen Allen, VA 23060

Dear Mr. Mullins:

Transmitted herein for your consideration is land application site for Everett Pickett Upshaw (designated as KW 36, (fields 1-10) located in King William County, Virginia. This submission contains strictly site specific information. Please refer to the operations and maintenance manual submitted under separate cover for all non-site specific information.

Do not hesitate to contact me at (804) 443-2170 should you have any questions or require additional information.

Sincerely,

D. Steve McMahon

Sr. Technical Services Director

n. Sten menfuh

/cmw



### FIELD SUMMARY SHEET

Everett Pickett Upshaw KW36

SYNAGRO	GROSS	NET	FSA	FSA	ТОРО	
FIELD	<b>ACRES</b>	ACRES	TRACT	FIELD	QUAD	OWNER
#			#	#		
					-	
36-01	20.0	18.1	955	2 - 5	King & Queen CH	Everett, Joni, & William Upshaw
36-02	21.3	20.8	994	9	King & Queen CH	Everett, Joni, & William Upshaw
36-03	22.2	21.3	994	4	King & Queen CH	Everett, Joni, & William Upshaw
36-04	224.2	220.0	955	None	King & Queen CH	Everett, Joni, & William Upshaw
36-05	198.2	186.3	994	None	King & Queen CH	Everett, Joni, & William Upshaw
36-06	169.4	167.7	994	None	King & Queen CH	Everett, Joni, & William Upshaw
36-07	223.9	170.3	994	None	King & Queen CH	Everett, Joni, & William Upshaw
36-08	35.3	34.4	759	2	King & Queen CH	Everett, Joni, & William Upshaw
36-09	210.5	201.5	759	None	King & Queen CH	Everett, Joni, & William Upshaw
36-10	204.5	203.9	None	None	_	Everett, Joni, & William Upshaw
						-
TOTALS:	1329.5	1244.3				

### VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION FORM D: MUNICIPAL EFFLUENT AND BIOSOLIDS

PART D-VI: LAND APP	LICATION AGREEMENT	- BIOSOLIDS AND IN	DUSTRIAL RESIDUALS	
here as "Landowner", and Sterminated in writing by either event of a sale of one or modidentified in this agreement	er party or, with respect to the ore parcels, until ownership o	the "Permittee". This agrences parcels that are retains all parcels changes. If controlling the changes of the controlling that the changes is the changes of the changes o	referred to eement remains in effect until it is ned by the Landowner in the ownership of individual parcels aged will no longer be authorized	
	er of record of the real proper or reclamation sites identifie		An_, Virginia, which includes entified on the tax map(s)	
Table 1.: Parcels auth	norized to receive biosolids,	water treatment residuals	or other industrial sludges	
Tax Parcel ID	Tax Parcel ID	Tax Parcel ID	Tax Parcel ID	1
47-24,25,31,32,65,23				
48-4,34				-
48-32,324,33,6,5				
48-14,15,17,12  Additional parcels containing Land	Application Sites are identified on	Supplement A (check if applicate	ple)	_
Check one: □, The	e Landowner is the sole own e Landowner is one of multip	er of the properties identif	fied herein.	
within 38 months of the later  1. Notify the purchase later than the date of 2. Notify the Permittee  The Landowner has no other notify the Permittee immediator application or any part of incorrect.	st date of biosolids application or transferee of the application of the property transfer; and e of the sale within two weeks ar agreements for land applicately if conditions change suffithis agreement becomes in	on, the Landowner shall: ble public access and cro s following property transf cation on the fields identifi ch that the fields are no lo valid or the information he	ed herein. The Landowner will onger available to the Permittee erein contained becomes	
agricultural sites identified a inspections on the land iden purpose of determining com	ntified above, before, during on pliance with regulatory requ	Landowner also grants pe or after land application of irements applicable to suc	ermission for DEQ staff to conduct f permitted residuals for the ch application.	
Class B biosolids Wate  X Yes    No    X Yes  Pout C. Upshi  EVERETT PICKETT UP	an Conicy an Conicy	ood processing waste Yes □ No 9Sha W ww 4716 CUSTIS I	Other industrial sludges X Yes □ No MILLPENDRD WEST POINT, VA	1 231
Landowner - Printed Name, Title	Signature Signature	h	Mailing Address	
Permittee: Synagro, the Permittee, agrees by the VPA Permit Regulation a	s to apply biosolids and/or indus	he rates identified in the nutr	wner's land in the manner authorized ient management plan prepared for le of Virginia.	
			ed schedule for land application and the source of residuals to be applied	
	assigning signatory authority to for review upon request. (Do no			,
D. Steve Men	Jahon N. St	in McMah	10647 Tidewater	Te, 1 2438
Permittee – Authorized Represer	ntative Signature	, ,	Mailing Address	_ 0

Rev 9/14/2012 Page 1 of 2

Printed Name

#### VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION: PART D-VI LAND APPLICATION AGREEMENT

Permittee: Synagro	County or City: KING WILLIAN	•
Landowner: E.P. URSHAW		

#### Landowner Site Management Requirements:

I, the Landowner, I have received a DEQ Biosolids Fact Sheet that includes information regarding regulations governing the land application of biosolids, the components of biosolids and proper handling and land application of biosolids.

I have also been expressly advised by the Permittee that the site management requirements and site access restrictions identified below must be complied with after biosolids have been applied on my property in order to protect public health, and that I am responsible for the implementation of these practices.

I agree to implement the following site management practices at each site under my ownership following the land application of biosolids at the site:

1. Notification Signs: I will not remove any signs posted by the Permittee for the purpose of identifying my field as a biosolids land application site, unless requested by the Permittee, until at least 30 days after land application at that site is completed.

#### 2. Public Access

- a. Public access to land with a high potential for public exposure shall be restricted for at least one year following any application of biosolids.
- Public access to land with a low potential for public exposure shall be restricted for at least 30 days
  following any application of biosolids. No biosolids amended soil shall be excavated or removed from
  the site during this same period of time unless adequate provisions are made to prevent public
  exposure to soil, dusts or aerosols;
- c. Turf grown on land where biosolids are applied shall not be harvested for one year after application of biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by DEQ.

### 3. Crop Restrictions:

- a. Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after the application of biosolids.
- b. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after the application of biosolids when the biosolids remain on the land surface for a time period of four (4) or more months prior to incorporation into the soil,
- c. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months when the biosolids remain on the land surface for a time period of less than four (4) months prior to incorporation.
- d. Other food crops and fiber crops shall not be harvested for 30 days after the application of biosolids;
- e. Feed crops shall not be harvested for 30 days after the application of biosolids (60 days if fed to lactating dairy animals).

#### 4. Livestock Access Restrictions:

ni C. Zisshans

Following biosolids application to pasture or hayland sites:

- a. Meat producing livestock shall not be grazed for 30 days.
- b. Lactating dairy animals shall not be grazed for a minimum of 60 days.
- c. Other animals shall be restricted from grazing for 30 days;
- Supplemental commercial fertilizer or manure applications will be coordinated with the biosolids and industrial
  residuals applications such that the total crop needs for nutrients are not exceeded as identified in the
  nutrient management plan developed by a person certified in accordance with §10.1-104.2 of the Code of
  Virginia;
- 6. Tobacco, because it has been shown to accumulate cadmium, should not be grown on the Landowner's land for three years following the application of biosolids or industrial residuals which bear cadmium equal to or exceeding 0.45 pounds/acre (0.5 kilograms/hectare).

Landowner's Signature Date

Rev 9/14/2012

Page 2 of 2



Everett Pickett Upshaw KW36 Fields 1 – 7



TAX MAP



Everett Pickett Upshaw KW36 Fields 8 – 10



TAX MAP

Tax ID Landowner Identification Sheet

Landowner	Field #	Tax ID
Everett Pickett, Joni, & William Upshaw	36 – 01	48 – 11
Everett Pickett, Joni, & William Upshaw	36 - 02	48 – 4
Everett Pickett, Joni, & William Upshaw	36 – 03	48 – 4
Everett Pickett, Joni, & William Upshaw	36 - 04	48 – 12, 14, 15, 17
Everett Pickett, Joni, & William Upshaw	36 - 05	48 - 1, 4, 6
Everett Pickett, Joni, & William Upshaw	36 – 06	48 - 33, 34
Everett Pickett, Joni, & William Upshaw	36 - 07	48 – 32, 32A, 35
Everett Pickett, Joni, & William Upshaw	36 - 08	47 – 65
Everett Pickett, Joni, & William Upshaw	36 - 09	47 – 23-25,31, 65
Everett Pickett, Joni, & William Upshaw	36 - 10	47 - 23

Field #	Latitude (north)	Longitude (west)	
36-01	37° 38' 17.48"	76° 54' 40.27"	
36-02	37° 38° 34.47"	76° 53' 53.19"	
36-03	37° 38° 23.13"	76° 53' 50.32"	
36-04	37° 37° 48.47"	76° 54' 44.25"	
36-05	37° 38° 34.41"	76 <sup>o</sup> 54' 19.08"	
36-06	37° 38° 14.30"	76° 53' 42.48"	
36-07	37° 38° 53.69"	76° 53' 10.12"	
36-08	37° 38' 19.93"	76° 55' 38.20"	
36-09	37° 38' 34.41"	76° 56' 03.55"	
36-10	37° 38' 14.36"	76° 56' 37.29"	

### **MAP LEGEND**



House/Dwelling with a well



**Rock Outcrop** 



Well



Lake/Pond



Slope which exceeds 15%



Intermittent Stream



Stream/River



Agricultural/Drainage Ditch



Field boundary



**Property Line** 



### **Environmentally Sensitive Areas**

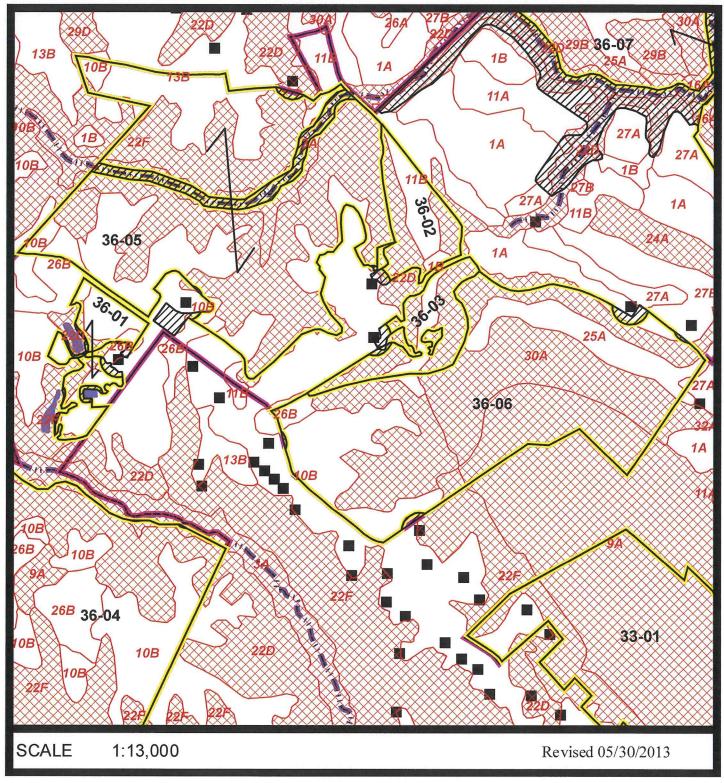
Field	Reason for Sensitive Area
36-01	High Leaching Potential (Map Units 22D, 22F - 20%)
36-02	High Water Table (Map Unit 30A – 17%) High Leaching Potential (Map Unit 22D – 40%)
36-03	High Water Table (Map Unit 30A – 42%) High Leaching Potential (Map Unit 22D – 36%)
36-04	High Water Table (Map Unit 9A – 5%) High Leaching Potential (Map Units 22D, 22F – 44%)
36-05	High Water Table (Map Unit 3A – 5%) Flooded Soils (Map Unit 3A – 5%) High Leaching Potential (Map Units 22D, 22F – 60%)
36-06	High Water Table (Map Units 9A, 30A – 53%) High Leaching Potential (Map Unit 22D – 19%)
36-07	High Water Table (Map Units 16A, 30A – 34%) Flooded Soils (Map Unit 16A – 12%) Poor Drainage (Map Unit 16A – 12%) High Leaching Potential (Map Units 8A, 22D, 29B – 58%)
36-08	High Water Table (Map Unit 9A – 7%) High Leaching Potential (Map Unit 22F – 15%)
36-09	High Water Table (Map Unit $9A - 22\%$ ) High Leaching Potential (Map Unit $22D - 8\%$ )
36-10	High Leaching Potential (Map Unit 22F - 17%)

### King William County Soils that are Environmentally Sensitive

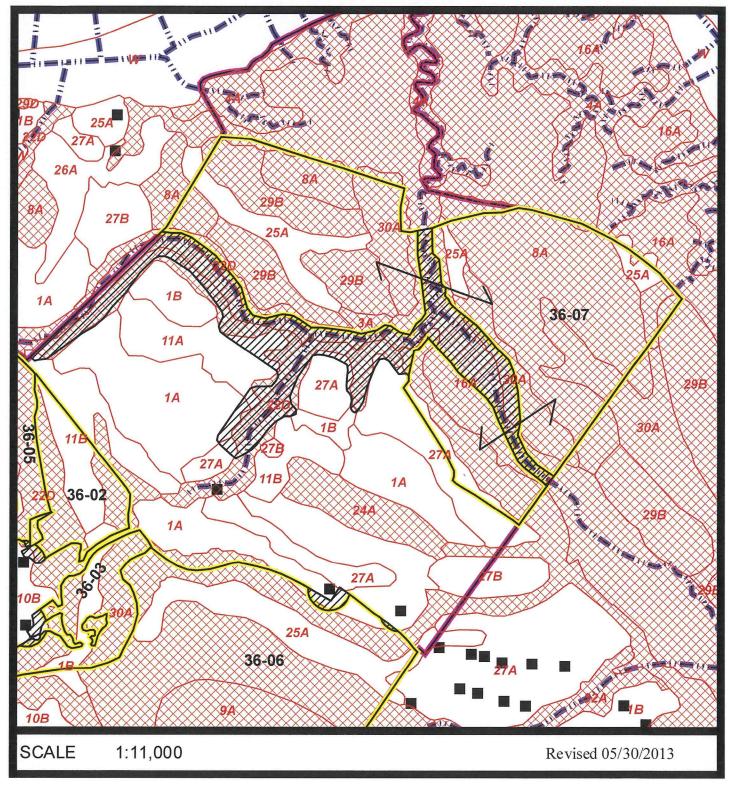
Soil Map Unit	Series Name	Time of year		<b>Environmental</b>
-		<b>High Water</b>	Flooded	
3A	Bibb/Kinston	Nov – June	Nov – June	Drainage
4A	Bohicket	Nov – June	Nov – June	
5A	Bojac	Jan – Dec		Leaching
6A, 6B	Bojac			Leaching
7A	Catpoint			Leaching
8A	Conetoe			Leaching
9A	Daleville	Nov – May		
14A	Kenansville			Leaching
15A	Lanexa	Jan – Dec	Jan – Dec	Drainage
16A	Mattan	Jan – Dec	Jan - Dec	Drainage
18A	Myatt	Nov – April		-
20A	Osier	Nov - March		Drainage
22D, 22F	Remlik/Nevarc			Leaching
23A	Riverview		Dec - March	
24A	Roanoke	Nov - May		
29B, 29D, 29F	Tarboro			Leaching
30A	Tomotley	Nov – April		
32A	Wehadkee	Nov – May	Nov - May	
			-	



Everett Pickett Upshaw KW36 Fields 1 – 3, 5, 6



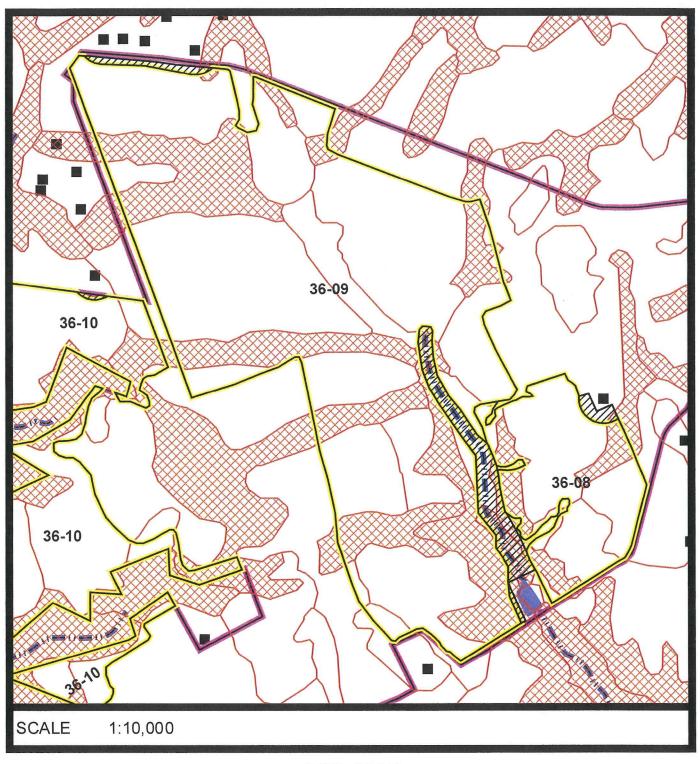
**SOIL MAP** 



**SOIL MAP** 

## **SYNAGR**

Everett Pickett Upshaw KW36 Fields 8, 9



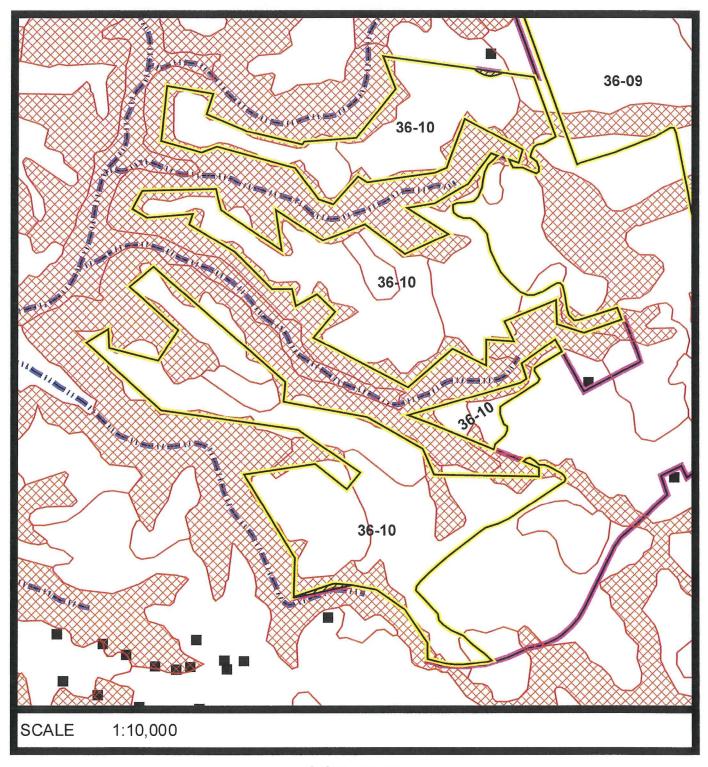
SOIL MAP

Environmentally Sensitive Areas

N

## **SYNAGRO**

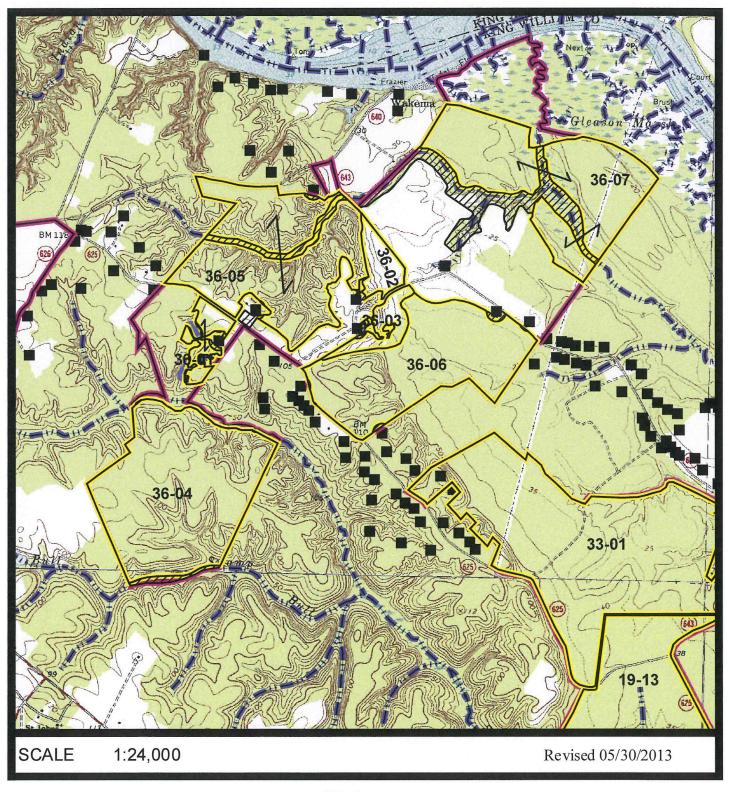
Everett Pickett Upshaw KW36 Field 10



SOIL MAP



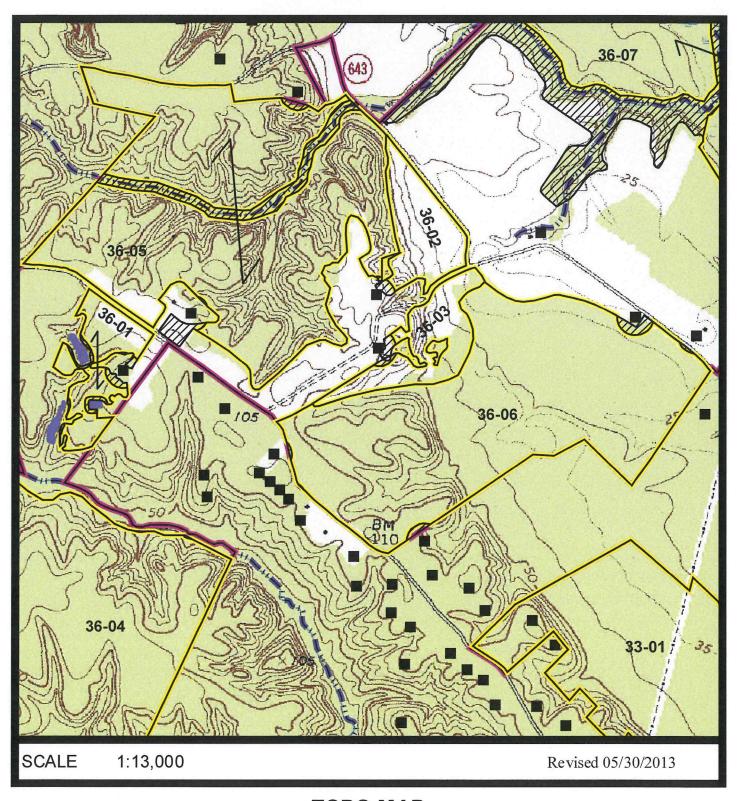
# **SYNAGR**



**TOPO MAP** 



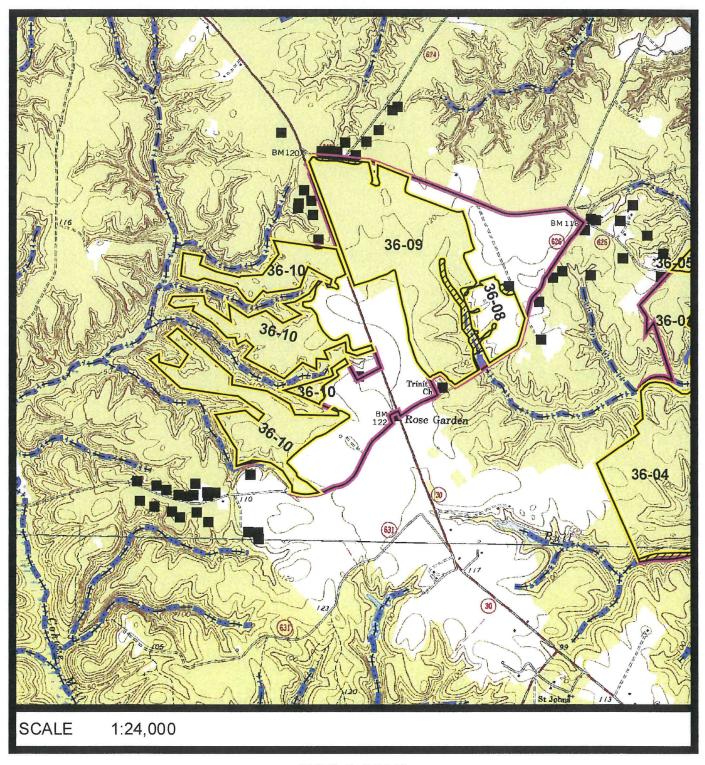
Everett Pickett Upshaw KW36 Fields 1 – 3, 5, 6



**TOPO MAP** 



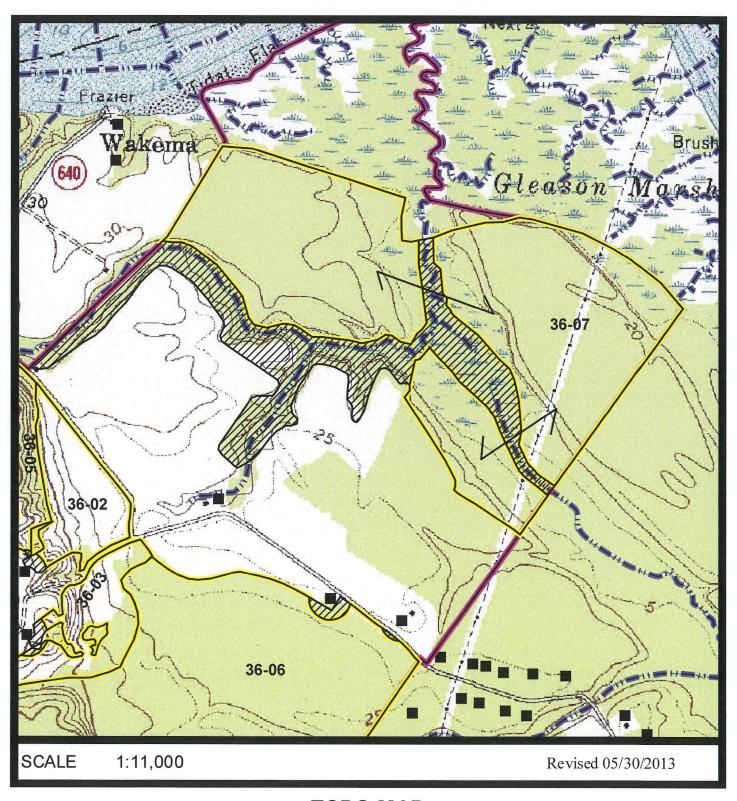
Everett Pickett Upshaw KW36 Fields 8 – 10



**TOPO MAP** 

N

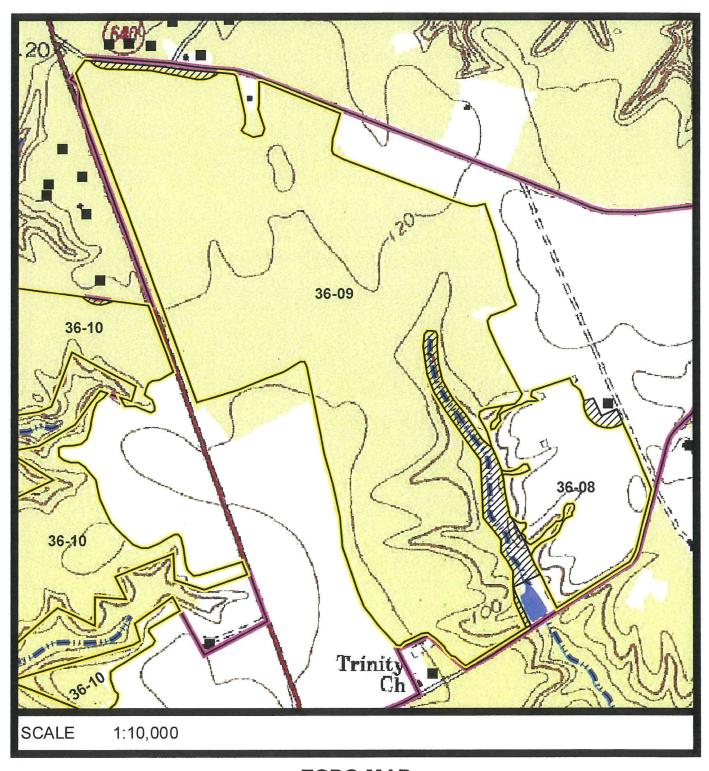
## **SYNAGRO**



**TOPO MAP** 

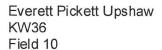


Everett Pickett Upshaw KW36 Fields 8, 9

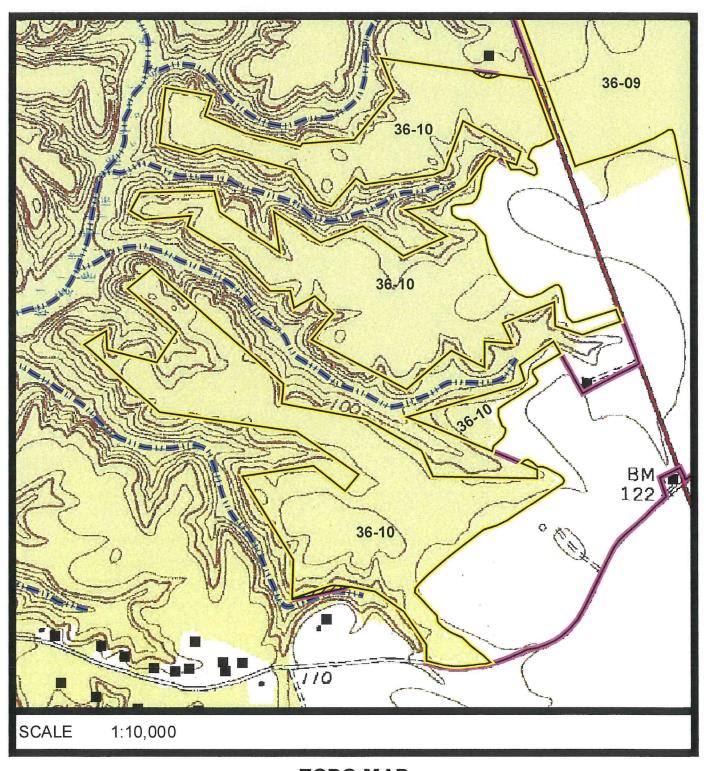


TOPO MAP

N



## **SYNAGR**<sup>©</sup>

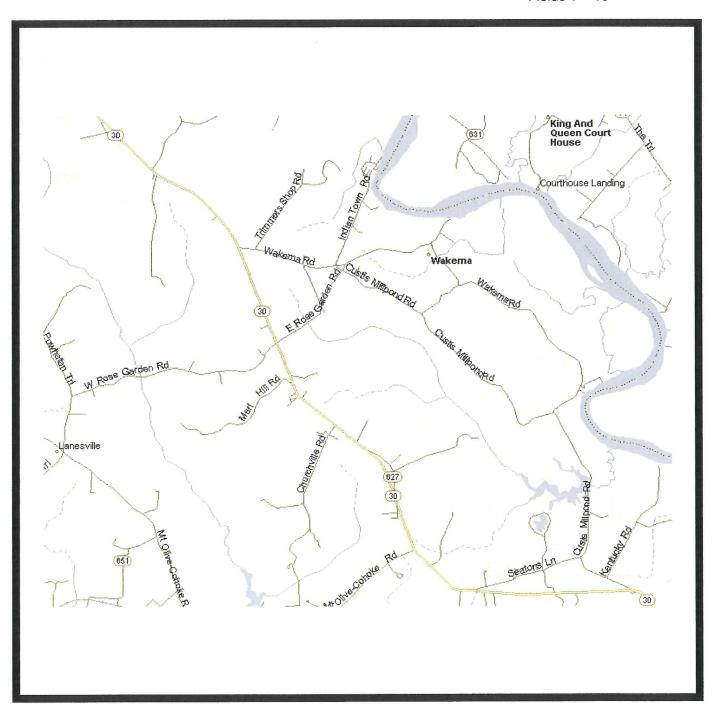


**TOPO MAP** 

□ N



Everett Pickett Upshaw KW36 Fields 1 – 10



**LOCATION MAP**